China's Water Management Options: Issues and Alternatives Summary

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China must make significant changes in water management assumptions and practices within the next decade to provide a foundation for sustainable economic development. China's 1988 Water Law, now under revision, must be promptly and universally adopted. It provides a comprehensive and rational framework for implementing newly defined relations among government agencies' roles, innovative economic strategies, and better targeted structural interventions to foster sustainable water use and more effective water control.

Critical management issues have been delimited and debated for several decades. Difficulties in making essential adjustments in response to water shortages, flooding, and deteriorating water quality, however, reflect complex problems of implementing institutional changes and adopting economic measures to control pollution and save water.

Current Chinese efforts to rationalize and coordinate water policies and programs are stymied by ambiguities surrounding responsibilities and priorities in pursuing various aspects of the water management enterprise, commonly referred to as *shuili* (water benefits), encompassing technical and scientific, historical-cultural, and institutional aspects. Clear definitions are essential if specific economic, technical, or institutional objectives are to be met. This is especially true in the present context. Mutually beneficial results from a US-China cooperative technical program in water resources management require both sides' recognition of distinctive policy, legal, and culturally-grounded perspectives on diverse water issues, management goals and standards, and institutional constraints and opportunities.

In the transition to a market economy underway since the late 1980s, traditional functions and responsibilities of the Ministry of Water Resources are being reassessed in light of new pressures to conserve and control water, maintain and restore water quality, and protect "ecological balance" (i.e., ecosystem integrity and ecological services).

To achieve these multiple goals, the Ministry is expected to take the lead in shaping a new management regime with three major thrusts: 1) primary reliance on the nascent rule of law to promote coordinated water resources development, protection, and use, building on the 1988 Water Law and complementary soil conservation, pollution control, forestry, energy conservation, land management, and other environment-related laws; 2) improved vigilance, efficiency, and economy in maintaining and strengthening infrastructure for better flood protection, relief, and reconstruction, along with active promotion of regulatory and technical water saving measures to enhance urban supply, and industrial, energy, and agricultural production; and 3) rapid "industrialization" (i.e. commercialization) of all aspects of the water enterprise to reduce the need for government subventions.

The insatiable water demands of China's growth-driven market economy must be tempered by the realization that China's prosperity and stability depends, as it has for over two millennia, on the conversion of water shortages and hazards into water benefits for people and nature. Technical and institutional measures to save water and improve water quality in the various sectors can contribute to this difficult task. China's main challenge, however, is successfully applying modern water management policy tools. In the next century and beyond, water will continue to be the key element in China's sustainable development.

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